

FIG.1



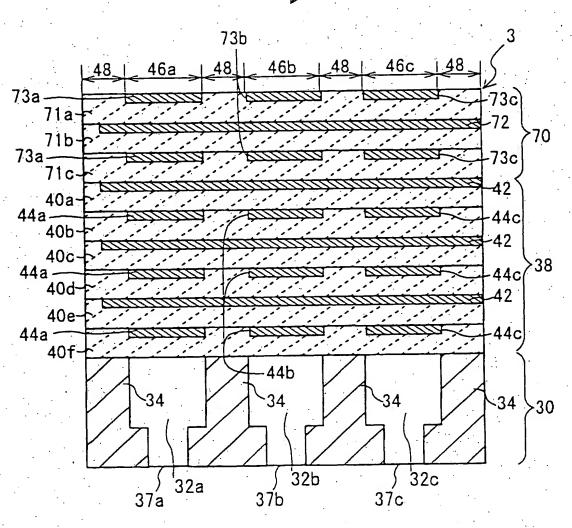


FIG.3

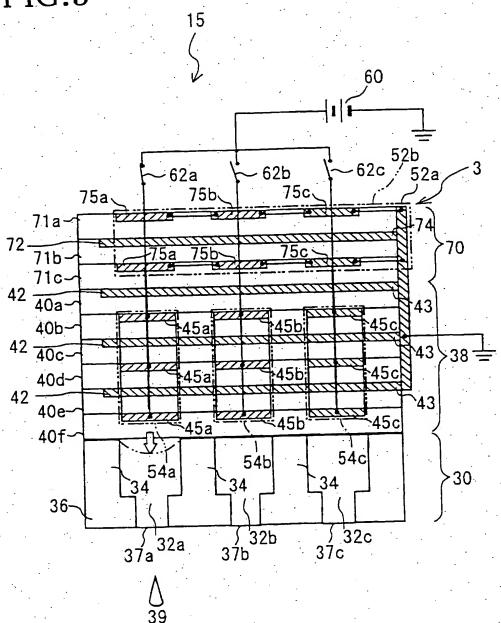
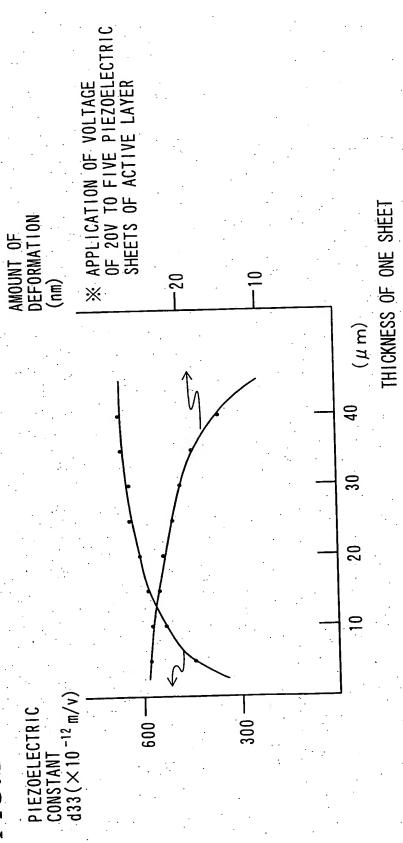
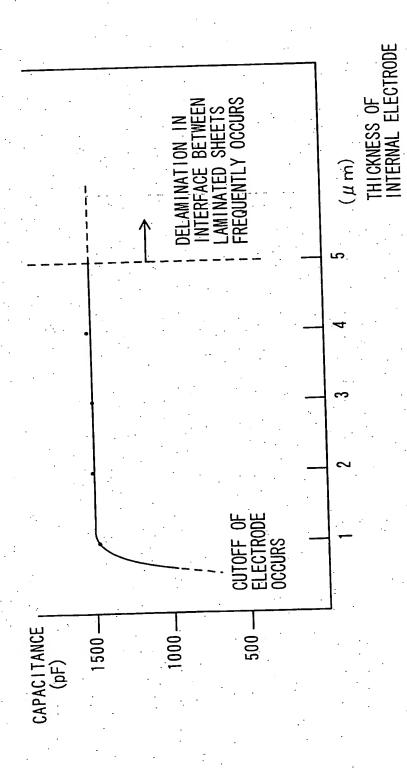


FIG.4



THICKNESS OF ONE PIEZOELECTRIC SHEET AND CHARACTERISTICS

FIG.5



THICKNESS OF INTERNAL ELECTRODE AND CAPACITANCE

FIG.6

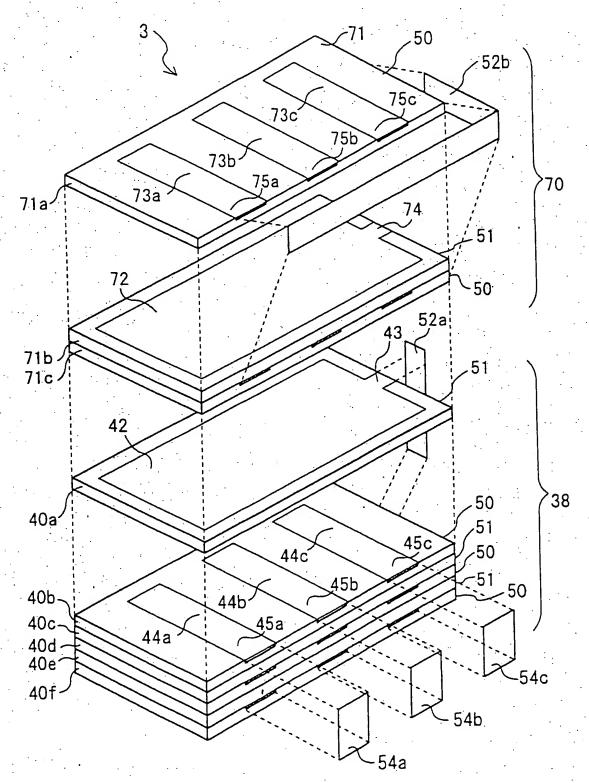


FIG.7

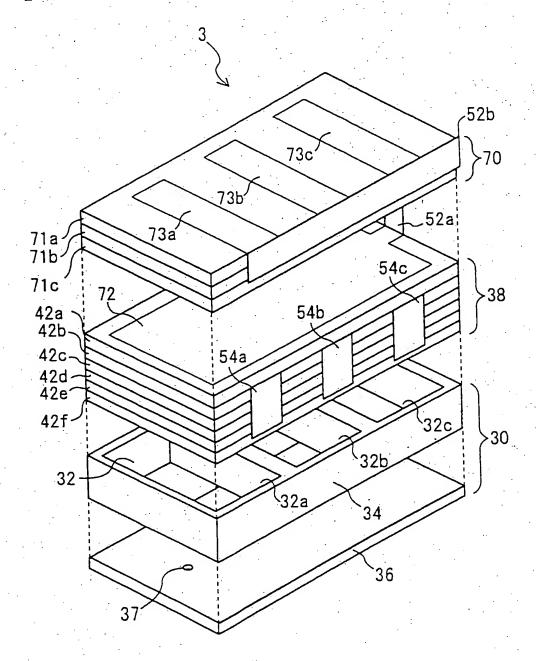


FIG.8

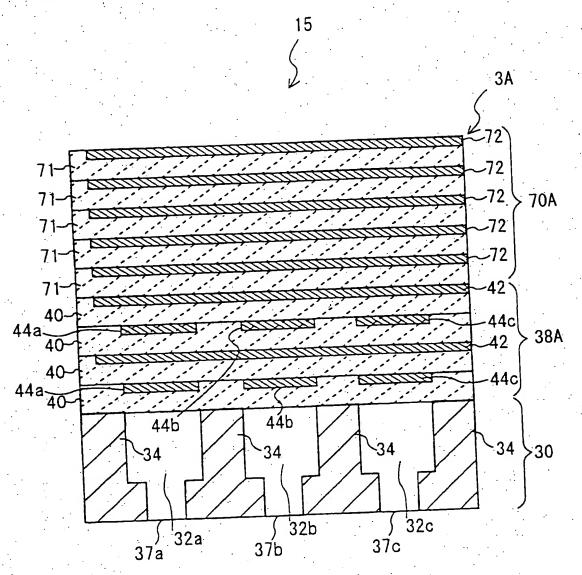
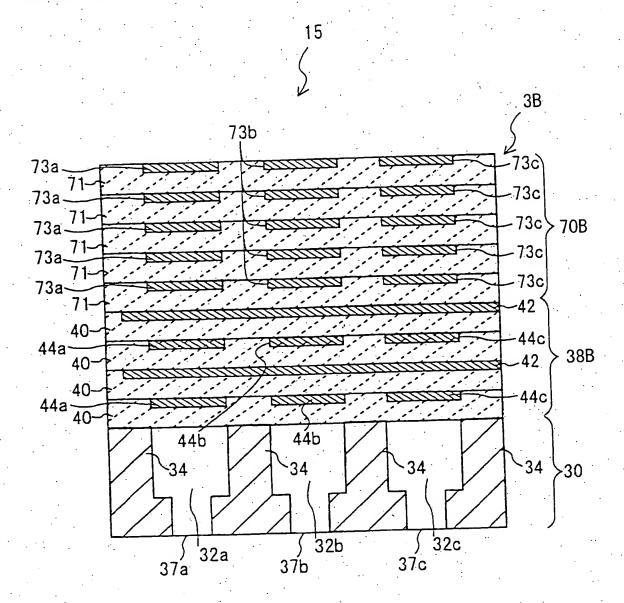


FIG.9



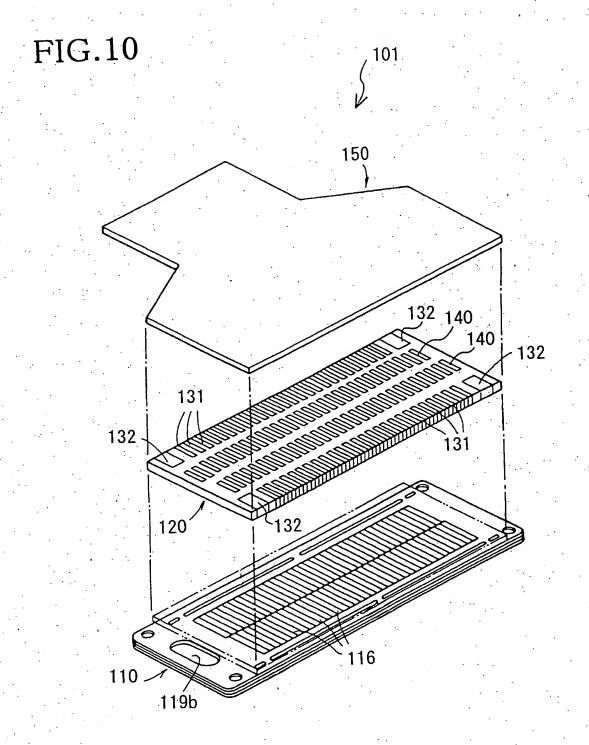


FIG.11

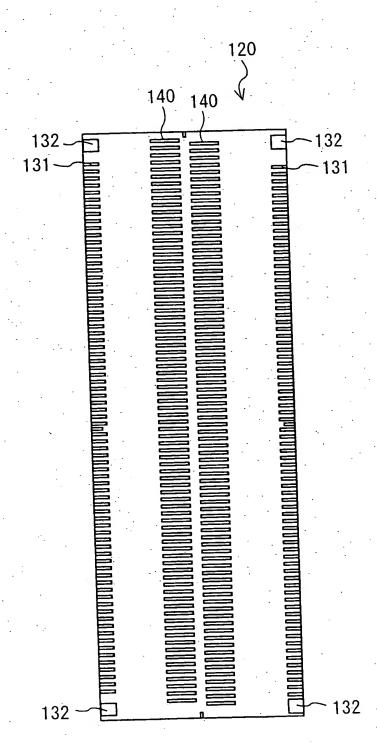


FIG.12

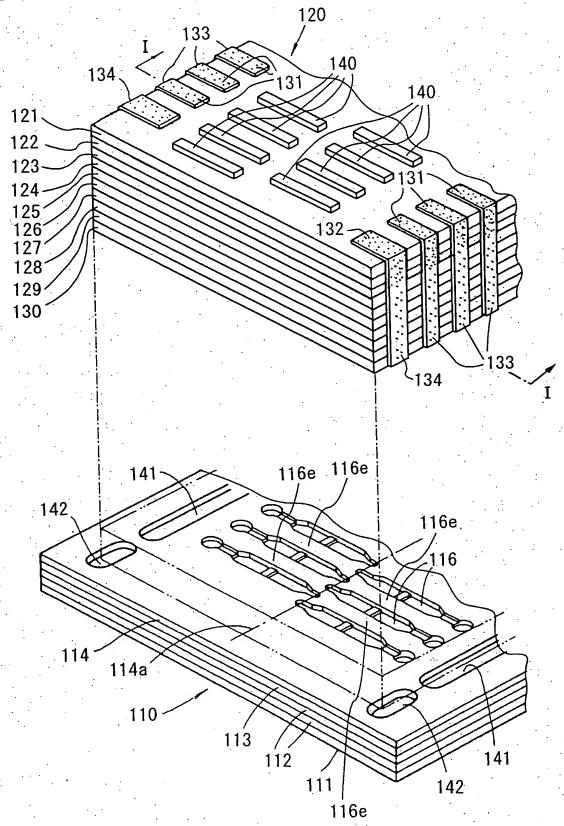


FIG.13

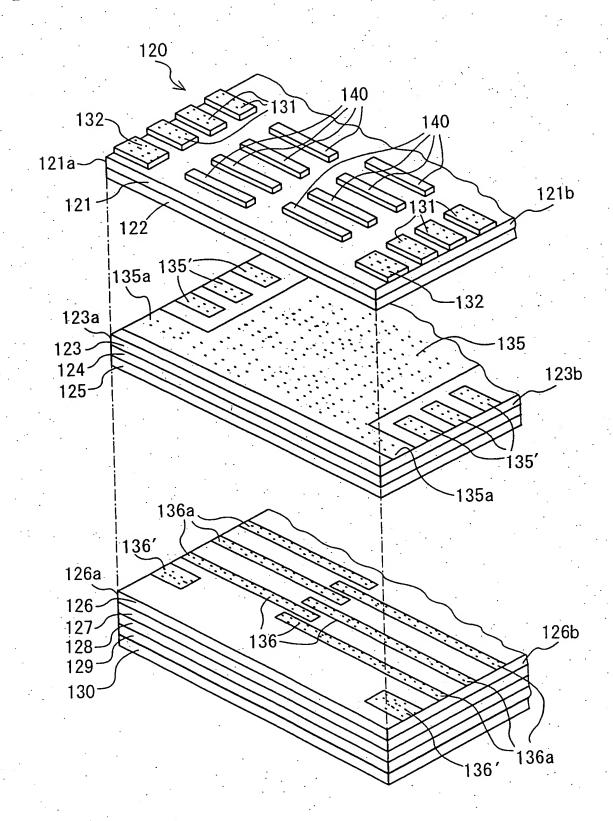


FIG.14

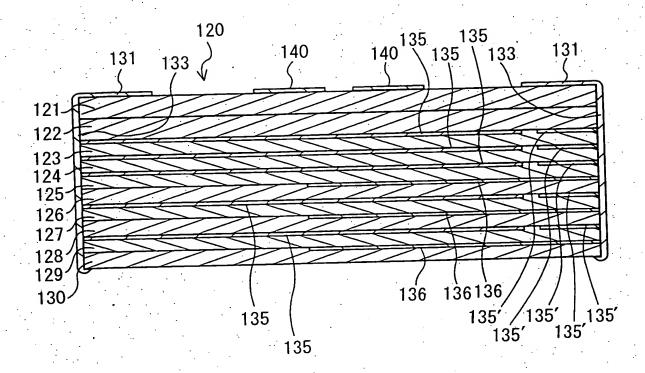


FIG.15

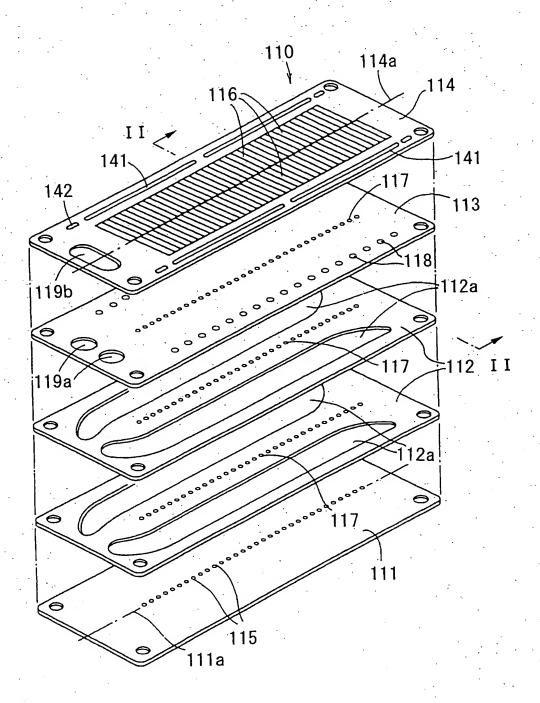


FIG.16

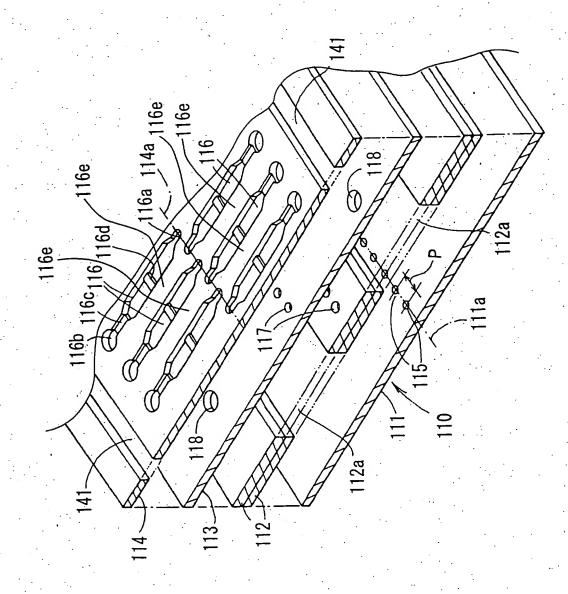


FIG.17

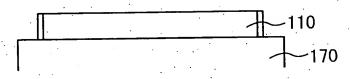


FIG.18

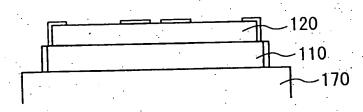
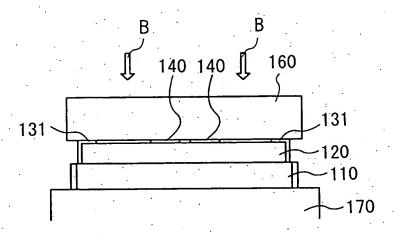


FIG.19



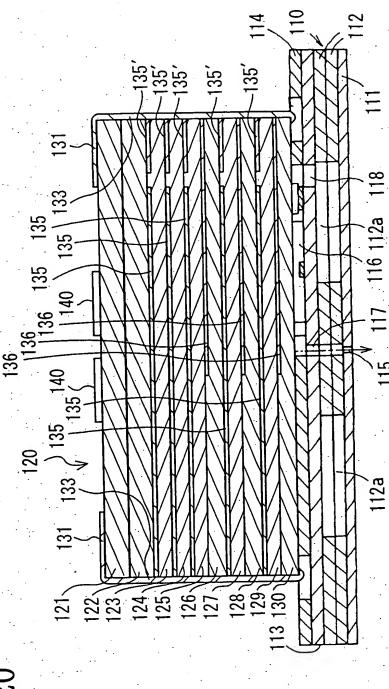
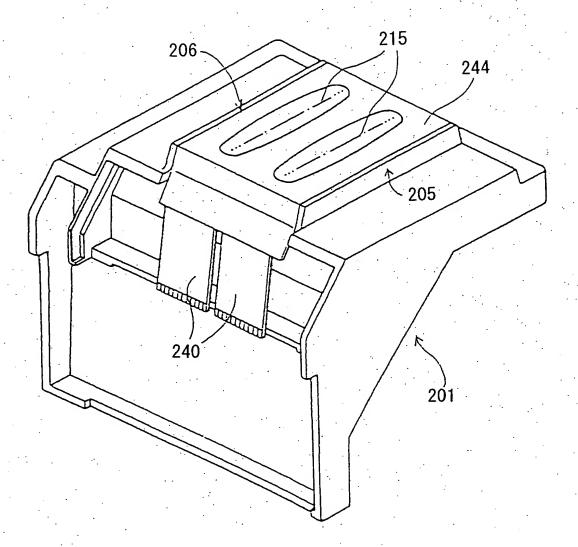
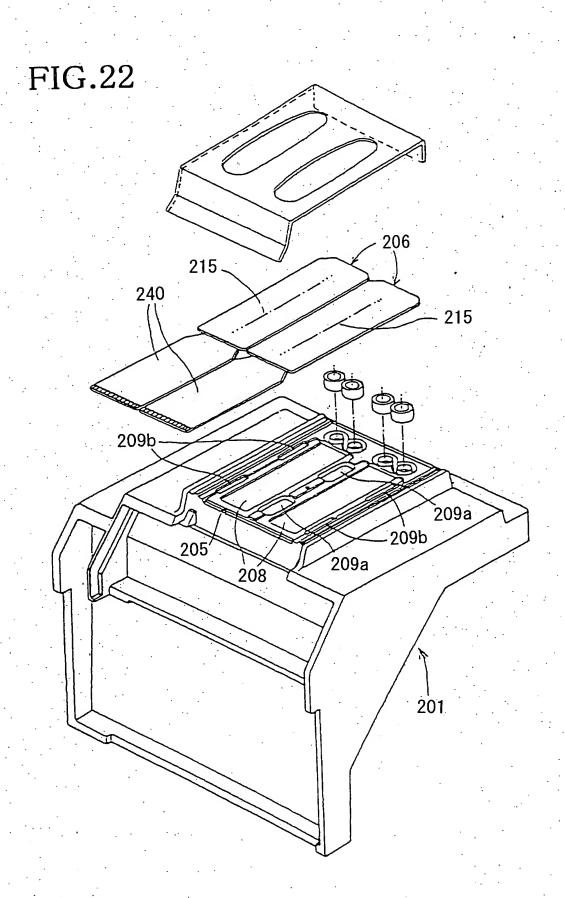


FIG.21





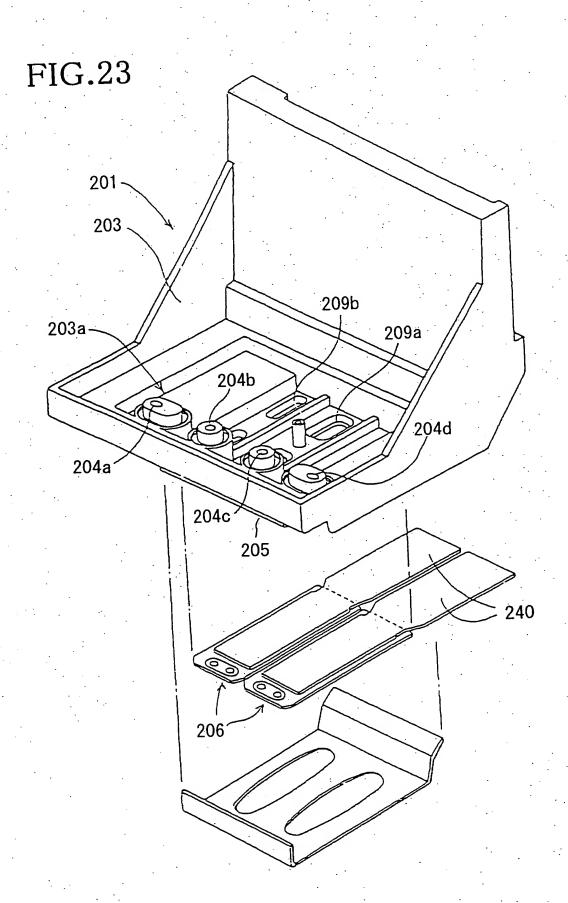


FIG.24

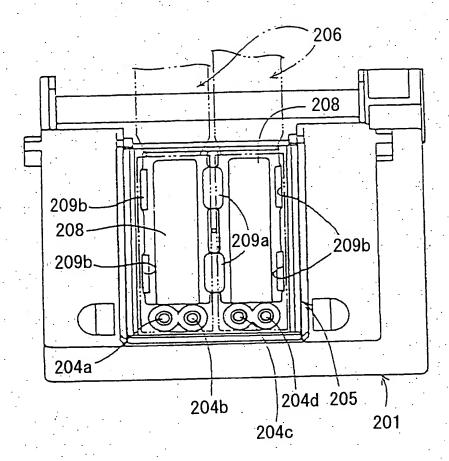
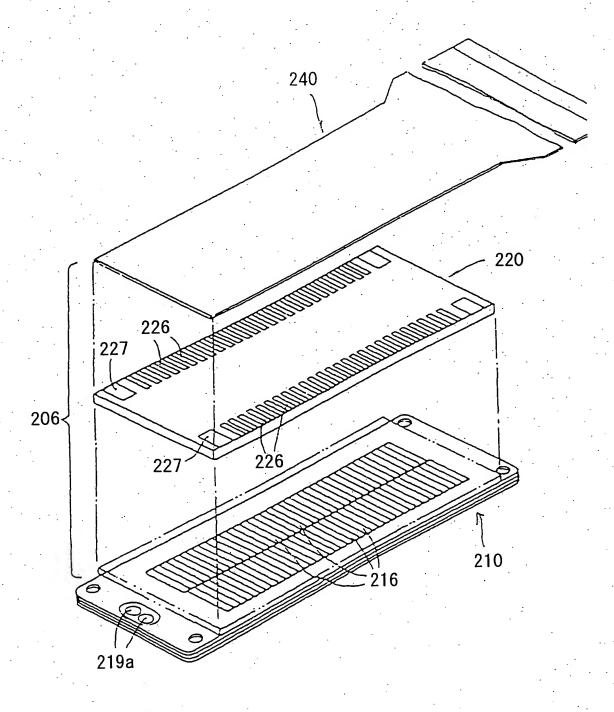
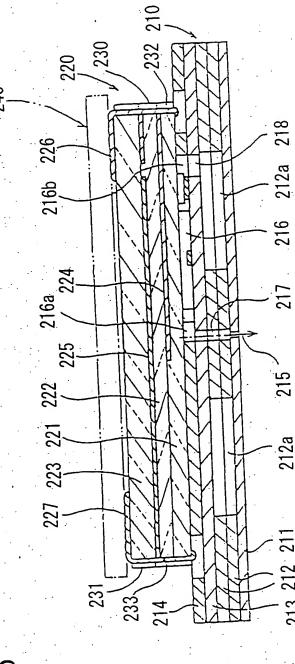


FIG.25





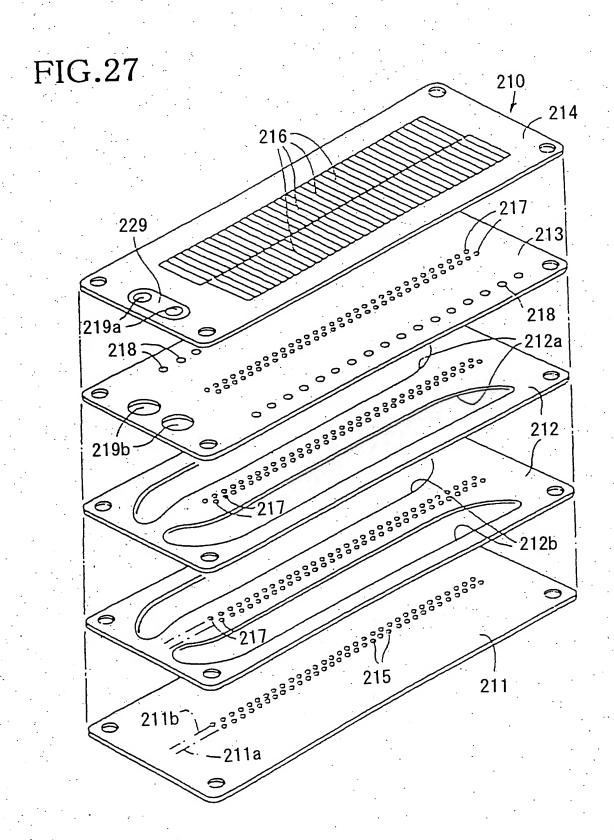


FIG.28

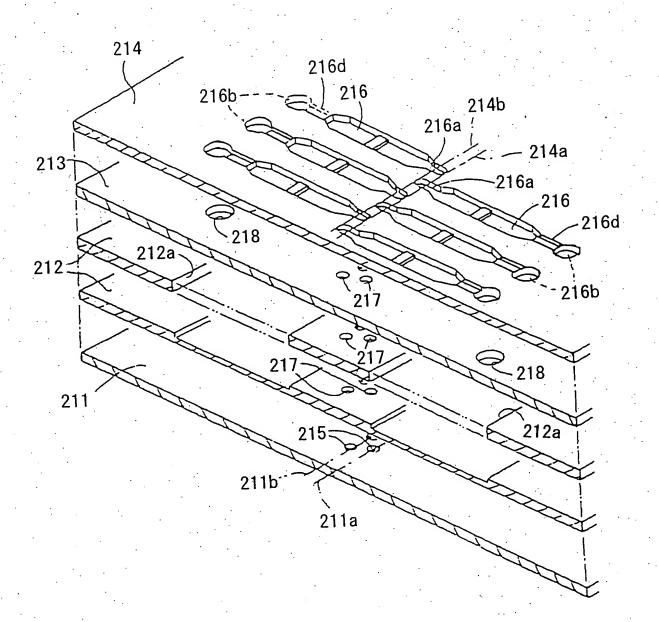
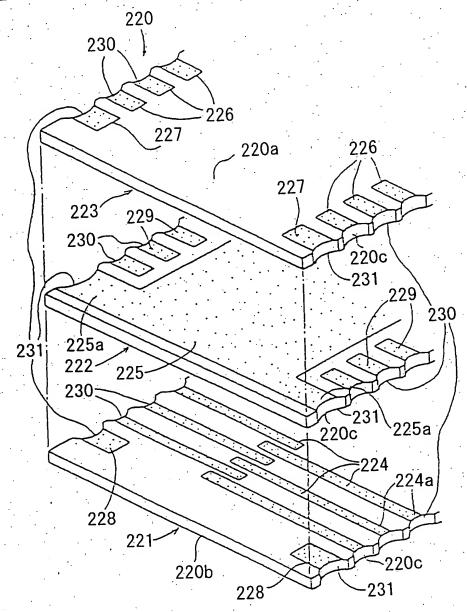
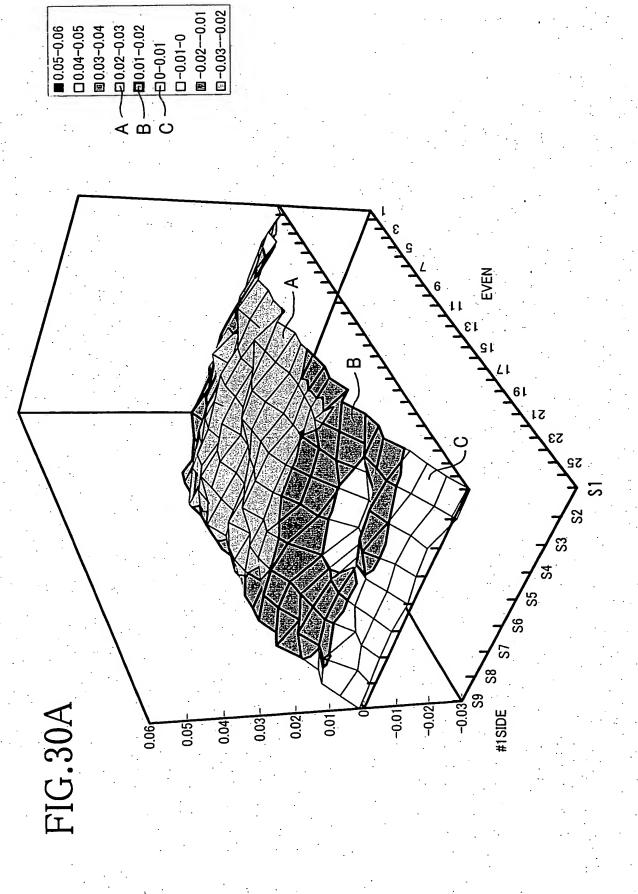


FIG.29





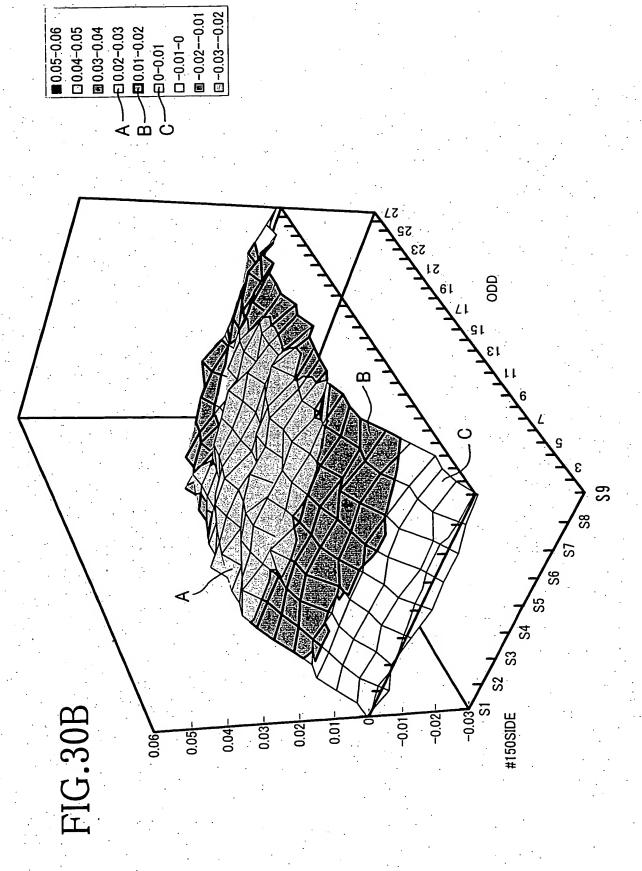
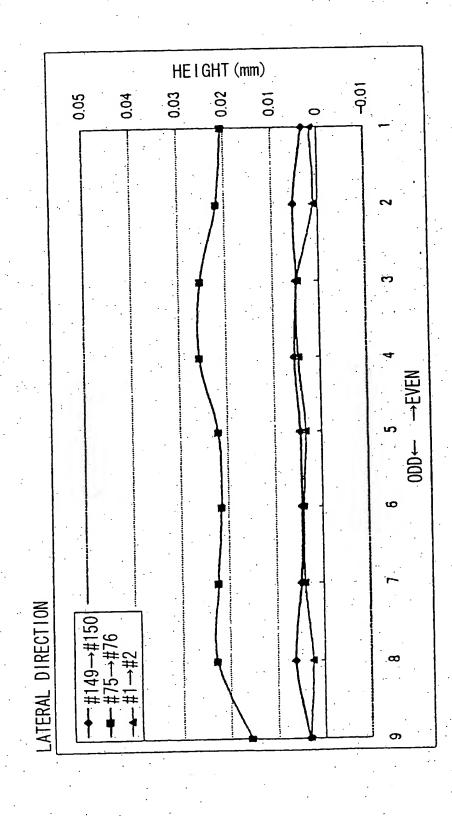
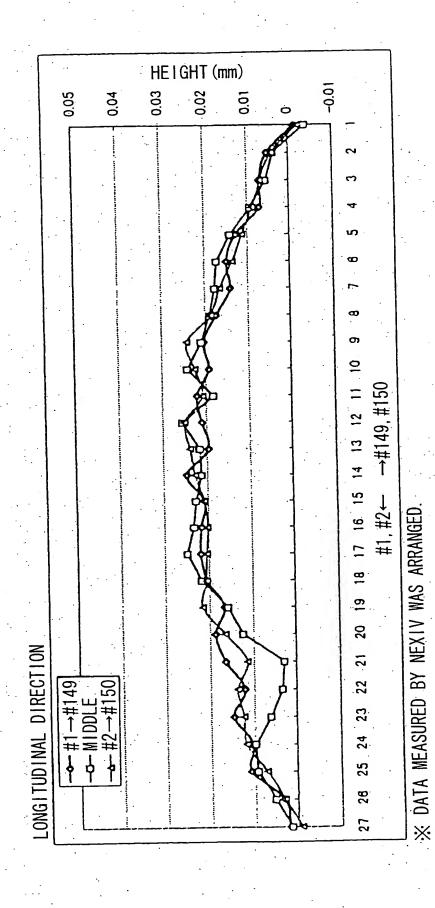
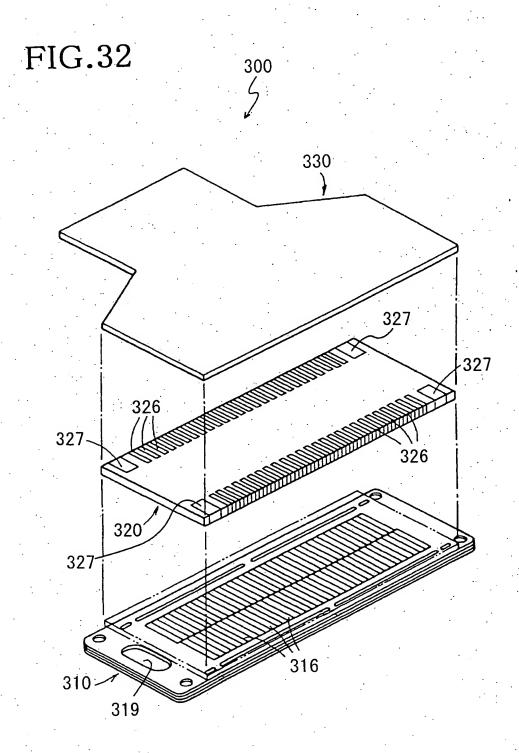


FIG.31A

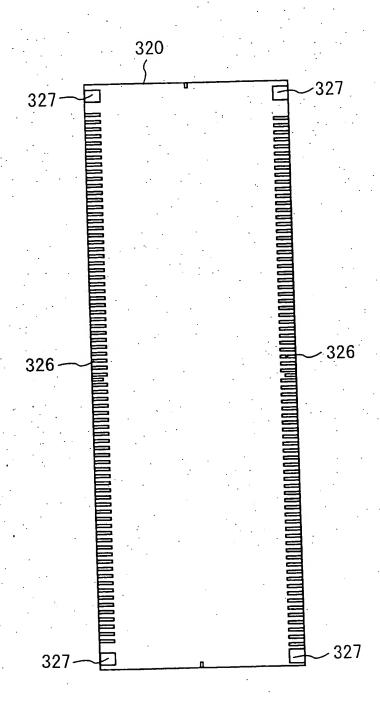






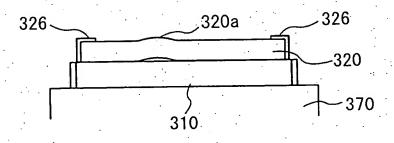
RELATED ART

FIG.33



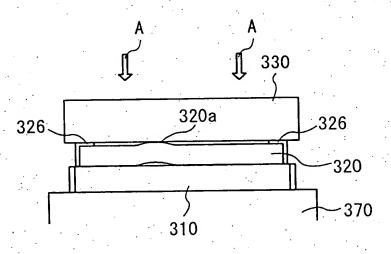
RELATED ART

FIG.34



RELATED ART

FIG.35



RELATED ART